REMARKS

Claims 24-54 were examined and reported in the Office Action. Claims 24-54 are rejected. Claims 24-30, 33, 35, 37-38, 43, 46, 48 and 50 are amended. Claims 24-54 remain.

Applicant requests reconsideration of the application in view of the following remarks.

I.   In the Drawings

Figures 4, 5, and 6 are objected to in the Office Action for failing to include reference signs mentioned in the description in compliance with 37 CFR 1.84(p)(5). Applicant has amended the drawings and specification to overcome the drawing objections. Corrected replacement sheets for Figures 6 and 7 are included with this response. Applicant notes that reference number 635 is mentioned in the original disclosure at page 9, line 13. Approval is respectfully requested.

II.   Summary

Applicant notes that it is asserted in the Office Action that the specification is objected for not including a section entitled "Brief Summary of the Invention." Applicant notes that 37 CFR §1.77(b) asserts that the specification "should include" a "Brief Summary of the Invention." Applicant respectfully traverses the aforementioned objection for the following reasons.

Applicant notes that 37 CFR §1.77(c) asserts that "[t]he text of the specification sections defined in paragraphs (b)(1) through (b)(11) of this section, **if applicable,** should be preceded by a section heading in uppercase and without underlining." (Emphasis added). Applicant notes that 37 CFR §1.73 asserts that "Such summary should, **when set forth,** be commensurate with the invention as claimed and any object recited should be that of the invention as claimed. (Emphasis added). Applicant also notes that MPEP section 608.01(d) asserts that "[a] brief summary of the invention indicating its nature and substance, which may include a statement of the object of the invention, should precede the detailed description. Such summary, should, **when set**

<u>forth</u>, be commensurate with the invention as claimed and any object recited should be that of the invention as claimed." (Emphasis added). The plain English meaning of the terms "when set forth" indicate that the summary need not be included in an application. Since 37 CFR §1.77(c) uses the terms "<u>if applicable,</u>" 37 CFR §1.73 and MPEP section 608.01(d) asserts "<u>when set forth</u>," it is clear that inclusion of a Brief Summary of the Invention section is not mandatory. Since the MPEP follows the language of the CFR, and includes the terms "when set forth," there is no indication, whatsoever, that a Brief Summary of the Invention section must mandatorily be included in an application for patent. Therefore, according to the CFR and MPEP, Applicant elects not to include a "Brief Summary of the Invention." Applicant also notes that according to 37 CFR §1.77(c), sections indicated in 37 CFR §1.77(b)(1)-(b)(11) that are not applicable need not be included in the application.

Accordingly, withdrawal of the specification objection for not including a "Brief Summary of the Invention" is respectfully requested.

III.   35 U.S.C. §101

It is asserted in the Office Action that claims 24-42 are rejected under 35 U.S.C. §101 because the claimed invention is directed to non-statutory subject matter. Applicant has amended the claims to overcome the 35 U.S.C. §101 rejection.

Accordingly, withdrawal of the 35 U.S.C. §101 rejections for claims 24-42 are respectfully requested.

IV.   35 U.S.C. §112, Second Paragraph

A.   It is asserted in the Office Action that claim 27 is rejected under 35 U.S.C. §112, second paragraph, as being incomplete for omitting essential steps, i.e. stating where the "old password" comes or its relationship to the current password. Applicant has amended claim 27 to overcome the 35 U.S.C. §112, second paragraph rejection.

Accordingly, withdrawal of the 35 U.S.C. §112, second paragraph rejection for claim 27 is respectfully requested.

B.   It is asserted in the Office Action that claims 32-35, 39, 45-48, and 51 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter. Applicant has amended the claims to overcome the 35 U.S.C. §112, second paragraph rejection.

Applicant notes that one of ordinary skill in the use of passwords or encryption regarding passwords would know that the term "strong password" has a standard meaning in the art. Applicant gives as evidence of the standard meaning the following:

From the website: http://www.webopedia.com/TERM/S/strong_password.html

Strong Password "(strâng pas´wërd) (n.) A password that is difficult to detect by both humans and computer programs, effectively protecting data from unauthorized access. A strong password consists of at least six characters (and the more characters, the stronger the password) that are a combination of letters, numbers and symbols (@, #, $, %, etc.) if allowed. Passwords are typically case-sensitive, so a strong password contains letters in both uppercase and lowercase. Strong passwords also do not contain words that can be found in a dictionary or parts of the user's own name."

From the website
http://searchwin2000.techtarget.com/gDefinition/0%2C294236%2Csid1_gci914537%2
C00.html

"A strong password is one that is designed to be hard for a person or program to discover. Because the purpose of a password is to ensure that only authorized users can access resources, a password that is easy to guess is a security risk. Essential components of a strong password include sufficient length and a mix of character types."

From the website http://www.uis.edu/cts/netid/

"The University of Illinois Interim Security Policy requires the use of strong user passwords wherever possible. Strong passwords are required on both campus NetIDs and EnterpriseIDs...."

The definition of a <u>strong password</u> is as follows:

*   The password must contain at least one UPPER CASE letter.

*   The password must contain at least one LOWER CASE letter.

*   The password must contain at least one DIGIT: (0, 1, 2, 3, 4, 5, 6, 7, 8, 9)

*   Passwords cannot contain any part of your network account (username), more commonly known as your NetID

*   The password must be at least eight characters long.

*   The password cannot be any of your three previous passwords.

*   The password cannot contain any common word or proper name greater than three characters in length." (Emphasis added).

Accordingly, withdrawal of the 35 U.S.C. §112, second paragraph rejection for claims 32-35, 39, 45-48, and 51 are respectfully requested.

V.   35 U.S.C. § 102(e)

A.   It is asserted in the Office Action that claims 30, 32, 33, 36, 38, 39, 43, 45, 46, 49 and 51 are rejected under 35 U.S.C. § 102(b), as being anticipated by U. S. Patent No. 6,064,736 issued to Davis et al. ("Davis"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

According to MPEP §2131, "'[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.' (Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). 'The identical invention must be shown in as complete detail as is contained in the ... claim.' (Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, *i.e.*, identity of

terminology is not required. (In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990))."

Applicant's amended claim 30 contains the limitations of "[a] method performed by a machine comprising: generating a hash from a particular salt value associated with a specific software application and input data; generating a password from the hash; and returning the password to the software application to gain entry to the software application."

Applicant's amended claim 43 contains the limitations of "[a] program storage device readable by a machine comprising instructions that cause the machine to: generate a hash from a particular salt value associated with a specific software application and input data; generate a password from the hash; and return the password to the software application to gain entry to the software application."

Davis discloses a two party key authentication and verification where data is allowed to flow between a client and a server after verification. Davis discloses a nonce and the User ID of the client is sent to the server where the server creates a random secret value to be used in a DES algorithm to set up the encrypted session. The nonce in Davis, if compared to a salt in Applicant's claimed invention, is not a particular nonce that is associated with a specific software application. In fact, since a nonce is based on time or can be a time stamp, it is hardly likely that a particular nonce could ever be associated with a specific software application.

Therefore, since Davis does not disclose, teach or suggest all of Applicant's amended claims 30 and 43 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(e) has not been adequately set forth relative to Davis. Thus, Applicant's amended claims 30 and 43 are not anticipated by Davis. Additionally, the claims that directly or indirectly depend on claims 30 and 43, namely claims 32, 33, 36, 38 and 39, and 45, 46, 49 and 51, respectively, are also not anticipated by Davis for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 102(b) rejections for claims 30, 32, 33, 36, 38, 39, 43, 45, 46, 49 and 51 are respectfully requested.

B.   It is asserted in the Office Action that Claims 24-26. 28-30, 32, 33, 35-38, 43, 45, 46, and 48-50 are rejected in the Office Action under 35 U.S.C. § 102(e) as being anticipated by, or in the alternative, under 35 U.S.C. 103(a) as obvious over U. S. Patent No. 6,141, 760 issued to Abadi et al. ("Abadi") in view of Menezes, "Handbook of Applied Cryptography," 1997 page 390. Applicant assumes the Office Action meant either Abadi or Menezes regarding the 35 U.S.C. §102(e) rejection. (Note Applicant addresses the 35 U.S.C. 103(a) rejection below in section VI. Regarding the 35 U.S.C. § 102(e) rejection, Applicant respectfully traverses the aforementioned rejection for the following reasons.

Applicant's amended claim 24 contains the limitations of "[a] method performed by a machine comprising: receiving a user password; receiving a name of an independent software application that requires a password for a user to use the software application; determining a specific salt value associated with the software application; computing a software application dependent password for a user, wherein the software application dependent password depends on the user password and the salt value for the software application; and returning the software application dependent password to the software application."

Applicant's amended claim 30 contains the limitations of "[a] method performed by a machine comprising: generating a hash from a particular salt value associated with a specific software application and input data; generating a password from the hash; and returning the password to the software application to gain entry to the software application."

Applicant's amended claim 43 contains the limitations of "[a] program storage device readable by a machine comprising instructions that cause the machine to: generate a hash from a particular salt value associated with a specific software application and input data; generate a password from the hash; and return the password to the software application to gain entry to the software application."

Abadi discloses generating passwords for password controlled access points. Abadi uses a master password, an access password and a user name. The master

password, service name and user name are combined using an irreversible function, e.g., a hash function, to generate a unique password. Abadi, however, does not teach, disclose or suggest "determining a specific salt value associated with the software application," "generating a hash from a particular salt value associated with a specific software application and input data," or "generate a hash from a particular salt value associated with a specific software application and input data."

Therefore, since Abadi does not disclose, teach or suggest all of Applicant's amended claims 24, 30 and 43 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(e) has not been adequately set forth relative to Abadi. Thus, Applicant's amended claims 24, 30 and 43 are not anticipated by Abadi. Additionally, the claims that directly or indirectly depend on claims 24, 30 and 43, namely claims 25-26 and 28-29, 32, 33 and 35-38, and 45-46 and 48-50, respectively, are also not anticipated by Abadi for the same reason.

Menezes discloses basic encryption techniques, such as slowing down password mapping, salting passwords and extending passwords to passphrases. Menezes, however, does not teach, disclose or suggest "determining a specific salt value associated with the software application," "generating a hash from a particular salt value associated with a specific software application and input data," or "generate a hash from a particular salt value associated with a specific software application and input data."

Therefore, since Menezes does not disclose, teach or suggest all of Applicant's amended claims 24, 30 and 43 limitations, Applicant respectfully asserts that a *prima facie* rejection under 35 U.S.C. § 102(e) has not been adequately set forth relative to Menezes. Thus, Applicant's amended claims 24, 30 and 43 are not anticipated by Menezes. Additionally, the claims that directly or indirectly depend on claims 24, 30 and 43, namely claims 25-26 and 28-29, 32, 33 and 35-38, and 45-46 and 48-50, respectively, are also not anticipated by Menezes for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 102(e) rejections for claims 24-26, 28-30, 32, 33, 35-38, 43, 45, 46, and 48-50 are respectfully requested.

VI.   35 U.S.C. § 103(a)

A.   It is asserted in the Office Action that Claims 24-26. 28-30, 32, 33, 35-38, 43, 45, 46, and 48-50 are rejected in the Office Action under 35 U.S.C. § 103(a) as being obvious over Abadi in view of Menezes. Applicant respectfully traverses the aforementioned rejection for the following reasons.

According to MPEP §2142 "[t]o establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." (In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)). Further, according to MPEP §2143.03, "[t]o establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. (In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)." *"All words in a claim must be considered* in judging the patentability of that claim against the prior art." (In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970), emphasis added.)

As discussed above in section V(B), neither Abadi nor Menezes teach, disclose or suggest "determining a specific salt value associated with the software application," "generating a hash from a particular salt value associated with a specific software application and input data," or "generate a hash from a particular salt value associated with a specific software application and input data."

Therefore, even if Abadi were combined with Menezes, the resulting invention would still not include all of Applicant's claimed limitations. Since neither Abadi, Menezes, nor the combination of the two, teach, disclose or suggest all the limitations of Applicant's amended claims 24, 30 and 43, as listed above, there would not be any motivation to arrive at Applicant's claimed invention. Thus, Applicant's amended

claims 24, 30 and 43 are not obvious over Abadi in view of Menezes since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claims that directly or indirectly depend from amended claims 24, 30 and 43, namely claims 25-26 and 28-29, 32, 33 and 35-38, and 45-46 and 48-50, respectively, would also not be obvious over Abadi in view of Menezes for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejections for claims 24-26, 28-30, 32, 33, 35-38, 43, 45, 46, and 48-50 are respectfully requested.

B. It is asserted in the Office Action that claim 27 rejected in the Office Action under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,141,760 to Abadi et al. in view of Menezes, and further in view of U. S. Patent No. 5,719,941 issued to Swift et al. ("Swift"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

Applicant has discussed Abadi and Menezes above in section V(B) regarding amended claim 24, from which claim 27 indirectly depends on.

Swift discloses a method for changing an account password stored at a physically remote location. A user submits both an old and a new password to its client machine and the client computes two message values. The first message is computed by encrypting the new password using a one-way hash of the old password as an encryption key. The second message is computed by encrypting the one-way hash of the old password using a one-way hash of the new clear text password as the encryption key. The server computes a first decrypted value by decrypting the first message using the one-way hash of the old password, previously stored at the server, as the decryption key. The server computes a second decrypted value by decrypting the second message using a one-way hash of the first decrypted value as the decryption key. The server compares the decrypted one-way hashed value, transmitted in encrypted form in the second message, to the pre-stored hashed old password. If the two values are equal, then the server replaces the old password by the new password.

Swift, however, does not teach, disclose or suggest "determining a specific salt value associated with the software application," "generating a hash from a particular

salt value associated with a specific software application and input data," or "generate a hash from a particular salt value associated with a specific software application and input data."

Therefore, even if Abadi and Menezes were combined with Swift, the resulting invention would still not include all of Applicant's claimed limitations. Since neither Abadi, Menezes, Swift nor the combination of the three, teach, disclose or suggest all the limitations of Applicant's amended claim 24, as listed above, there would not be any motivation to arrive at Applicant's claimed invention. Thus, Applicant's amended claim 24 is not obvious over Abadi in view of Menezes and further in view of Swift since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claim that indirectly depends from amended claim 24, namely claim 27, would also not be obvious over Abadi in view of Menezes and further in view of Swift for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection for claim 27 is respectfully requested.

C.   It is asserted in the Office Action that claims 31 and 44 are rejected in the Office Action under 35 U.S.C. § 103(a) as being obvious over Abadi in view of Menezes, and further in view of U. S. Patent No. 6,006,333 issued to Nielsen ("Nielsen "). Applicant respectfully traverses the aforementioned rejection for the following reasons.

Applicant's claim 31 directly depends on amended claim 30. Applicant's claim 44 directly depends on amended claim 43. Applicant has discussed claims 24 and 30 regarding Abadi and Menezes above in sections V(B) and VI(A).

Nielsen discloses a user operating a client system can access multiple remote servers that each require distinct passwords with a master password. Nielsen, however, does not teach, disclose or suggest "determining a specific salt value associated with the software application," "generating a hash from a particular salt value associated with a specific software application and input data," or "generate a hash from a particular salt value associated with a specific software application and input data."

Therefore, even if Abadi and Menezes were combined with Nielsen, the resulting invention would still not include all of Applicant's claimed limitations. Since neither Abadi, Menezes, Swift nor the combination of the three, teach, disclose or suggest all the limitations of Applicant's amended claims 30 and 43, as listed above, there would not be any motivation to arrive at Applicant's claimed invention. Thus, Applicant's amended claims 30 and 43 are not obvious over Abadi in view of Menezes and further in view of Nielsen since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claims that directly depends from amended claims 30 and 43, namely claims 31, and 44, respectively, would also not be obvious over Abadi in view of Menezes and further in view of Nielsen for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection for claims 31 and 44 is respectfully requested.

D. It is asserted in the Office Action that claims 40-42 and 52-54 are rejected in the Office Action under 35 U.S.C. § 103(a) as being obvious over Abadi in view of Menezes, and further in view of U.S. Patent Application No. 6,601,175 issued to Arnold et al. ("Arnold"). Applicant respectfully traverses the aforementioned rejection for the following reasons.

Applicant's claims 40-42 depend on amended claim 30. Claims 52-54 depend on amended claim 43. Applicant has discussed Abadi and Menezes above in sections V(B) and VI(A).

Arnold discloses a data processing system features are protected using a machine-specific limited-life password. The data processing system includes execution resources for executing a watchdog program, a limited-life value generator, and non-volatile storage that stores a machine-specific value partially derived from relatively unique information associated with the data processing system, such as a secret control password. The limited-life value can represent a timestamp that limits the duration that the machine-specific limited-life value is valid or a nonce that limits the number of times that the machine-specific limited-life value can be used. Arnold, however, does not teach, disclose or suggest "determining a specific salt value associated with the

software application," "generating a hash from a particular salt value associated with a specific software application and input data," or "generate a hash from a particular salt value associated with a specific software application and input data."

Therefore, even if Abadi and Menezes were combined with Arnold, the resulting invention would still not include all of Applicant's claimed limitations. Since neither Abadi, Menezes, Arnold nor the combination of the three, teach, disclose or suggest all the limitations of Applicant's amended claims 30 and 43, as listed above, there would not be any motivation to arrive at Applicant's claimed invention. Thus, Applicant's amended claims 30 and 43 are not obvious over Abadi in view of Menezes and further in view of Arnold since a *prima facie* case of obviousness has not been met under MPEP §2142. Additionally, the claims that directly depends from amended claims 30 and 43, namely claims 40-42, and 52-54, respectively, would also not be obvious over Abadi in view of Menezes and further in view of Arnold for the same reason.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejections for claims 40-42 and 52-54 are respectfully requested.
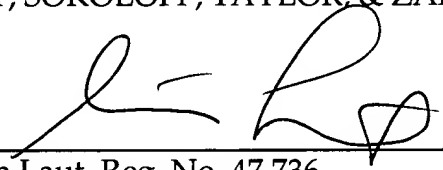
CONCLUSION

In view of the foregoing, it is submitted that claims 24-54 patentably define the subject invention over the cited references of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated: <u>October 18, 2004</u>   By: _____

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CERTIFICATE OF MAILING
I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P. O. Box 1450, Alexandria, Virginia 22313-1450 on October 18, 2004.

Jean Svoboda